

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE  
BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES**

<b>Appellants:</b> Dean J. Richtsmeier et al.	<b><u>CERTIFICATE OF FACSIMILE TRANSMISSION</u></b> I hereby certify that this paper is being facsimile transmitted to the United States Patent and Trademark Office, Alexandria, Virginia on the date below.
<b>Title:</b> DEVICE SWITCH ACTUATION	<div style="border: 1px solid black; padding: 2px; text-align: center;"><i>Todd A. Rathe</i> (Printed Name)</div>
<b>Appl. No.:</b> 10/772,889	<div style="border: 1px solid black; height: 40px; margin-top: 5px;"></div>
<b>Filing Date:</b> 02/04/2004	<div style="border: 1px solid black; height: 40px; margin-top: 5px;"></div>
<b>Examiner:</b> Kaplan, Hal Ira	<div style="border: 1px solid black; height: 40px; margin-top: 5px;"></div>
<b>Art Unit:</b> 2836	<div style="border: 1px solid black; height: 40px; margin-top: 5px;"></div>

**BRIEF ON APPEAL**

Mail Stop Appeal Brief-Patents  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Sir:

**1. Real Party in Interest**

The real party in interest is Hewlett-Packard Development Company, LP, a limited partnership established under the laws of the State of Texas and having a principal place of business at 11445 Compaq Center Drive W., Houston, TX 77070, U.S.A. (hereinafter "HPDC"). HPDC is a Texas limited partnership and is a wholly-owned affiliate of Hewlett-Packard Company, a Delaware corporation, headquartered in Palo Alto, California. The general or managing partner of HPDC is HPQ Holdings, LLC.



## **2. Related Appeals and Interferences**

There are no related appeals or interferences that will directly affect, be directly affected by, or have a bearing on the present appeal, that are known to Appellants or Appellants' patent representative.

## **3. Status of Claims**

Claims 1-39 were originally pending in the application. In a first substantive office action mailed on September 22, 2006, claims 1-39 were rejected. In a response filed on December 22, 2006, claim 37 was canceled; claims 1, 19, 21, 22, 25 and 32 were amended and claim 40 was added. In a second substantive office action mailed on March 8, 2007, claims 22 and 23 were allowed; claim 17, 21, 24, 29, 35 and 40 were objected to and claims 1-16, 18-20, 25-28, 30-34, 36, 38 and 39 were rejected. In a response filed on June 7, 2007, claims 1, 14-16, 25 and 32 were amended and claim 41 was added. In a 3rd substantive office action mailed on September 12, 2007, claims 1-36 and 38-41 were rejected. In a response filed on November 12, 2007, claim 42 was added. In a fourth substantive office action mailed on December 13, 2007, claims 1-36 and 38-42 were rejected. In a response filed on July 1, 2008, claim 42 was amended. This is an appeal from the Final Office Action mailed on October 16, 2008 finally rejecting claims 1-36 and 38-42. The present appeal is directed to Claims 1-36 and 38-42, i.e., all of the presently pending claims that stand rejected in this application.

## **4. Status of Amendments**

No amendments were filed after the Final Office Action.

## **5. Summary of Claimed Subject Matter**

### **A. Claim 1**

Claim 1 recites an electronic device comprising:

a face (32) (Page 3, lines 21-25);



a switch (26) configured such that successive actuations of the switch actuate the device between a first state and a second state (page 3, lines 10-20); and

a switch actuation mechanism (30, 130, 230, 330, 530) configured to actuate against a point of contact of the switch a first time in response to a first manual input along the face to actuate the device to the first state and to actuate against the same point of contact portion of the switch a second time in response to a second manual input along the face to actuate the device to the second state, wherein the second input has at least one characteristic, other than time at which it is performed, distinct from the first input (page 3, line 26-page 4, line 20; page 4, line 28-page 8, line 3; page 8, line 28-page 10, line 14).

B. Claim 2

Claim 2 depends from claim 1 and further recites that a function is performed when the device is in the first state and wherein the function is discontinued when the device is in the second state (page 6, lines 22-27).

C. Claim 9

Claim 9 depends from claim 5 which depends from claim 1. Claim 5 recites that the switch actuation mechanism includes a first movable surface (148, 248, 348, 556) and a second movable surface (150, 248, 348, 558) and wherein the first input includes moving the first movable surface and wherein the second input includes moving the second movable surface (page 5, lines 5-18). Claim 9 further recites that the first movable surface has a first indicia and wherein the second movable surface has a second indicia distinct from the first indicia. (page 5, lines 5-18; page 6, lines 9-27; page 7, lines 21-32; page 10, lines 1-14)



D. Claim 13

Claim 13 depends from claim 1 and intervening claims 5, 9, 10, 11 and 12. Claims 5 and 9 are listed above. Claim 10 further recites that the first indicia and the second indicia have distinct characteristics chosen from a group including color, shape, size, texture, markings, alphanumeric symbols and hardness (page 5, lines 9-12; page 6, lines 11-13; page 7, lines 21-32; page 10, lines 1-14). Claim 11 recites that the first indicia includes a first color and wherein the second indicia includes a second color distinct from the first color (page 6, lines 13-15; page 7, lines 21-32; page 10, lines 1-14). Claim 12 recites that the first color screen and that the second color is red (page 6, lines 13-15). Claim 13 further recites that the device performs a function upon movement of the first surface and discontinues the function upon movement of the second surface. (page 6, lines 22-27)

E. Claim 17

Claim 17 recites that the switch actuation mechanism (230) includes an actuation member (236) slidable along the face, wherein the first input includes sliding the actuation member in a first manner and wherein the second input includes sliding the actuation member in a second manner. (page 6, lines 1-8)

F. Claim 21

Claim 21 depends from claim 1 and further recites that the switch actuation mechanism is configured to also actuate the switch the second time in response to a third input identical to the first input, other than the time at which it is performed and in lieu of the second input (page 14, lines 17-20).

G. Claim 22

Claim 22 recites an electronic device comprising:



a face (32) (Page 3, lines 21-25);;

a switch configured such that successive actuations of the switch that are identical other than time at which they are performed, actuate the device between a first state and a second state (page 3, lines 10-20); and

means (30, 130, 230, 330, 530) along the face for actuating the switch a first time using a first manual input and a second time using a second manual input having at least one characteristic, other than time at which it is performed, distinct from the first manual input (page 3, line 26-page 4, line 20; page 4, line 28-page 8, line 3; page 8, line 28-page 10, line 14).

H. Claim 25

Claim 25 recites a method for actuating an electronic device between a first state and a second state, the method comprising:

providing a switch (26) configured such that successive actuations of the switch that are identical other than time at which they are performed, actuate the device between a first state and a second state (page 3, lines 10-20);

applying a first manual input, along a substantially planar face of the device so as to actuate the switch a first time (page 4, lines 9-20; page 10, line 15-page 11, line 2); and

applying a second manual input along the substantially planar face of the device so as to actuate the switch a second time, wherein the second manual input has at least one characteristic, other than the time at which it is performed, that is distinct from the first manual input (page 3, line 26-page 4, line 20; page 4, line 28-page 8, line 3; page 8, line 28-page 11, line 2).

I. Claim 29



Claim 29 depends from claim 25 and intervening claim 28. Claim 28 recites that the step of applying a first input includes moving an actuation member (236) in a first manner and wherein the step of applying a second input includes moving the actuation member (236) in a second distinct manner. Claim 29 further recites that the first manner includes sliding the actuation member (236) along the face in a first direction and wherein the second manner (236) includes sliding the actuation member in a second direction along the face (page 6, lines 1-8).

J. Claim 32

Claim 32 recites an image forming device comprising:

an image forming engine (520) actuatable between a first state and a second state (page 8, line 24; page 10, lines 16-17 and page 10, line 29-page 11, line 2);

a switch (26) configured such that successive actuations of the switch actuates the engine between the first state and the second state (page 3, lines 10-20; page 8, line 31-page 9, line 2);

a post (576) operably coupled to the switch to apply an actuating force to the switch (page 9, lines 8-10;

a first movable input surface (556) configured to successively actuate the switch (page 3, line 26-page 4, line 20; page 4, line 28-page 8, line 3; page 8, line 28-page 10, line 14); and

a second movable input surface (558) configured to successively actuate the switch, wherein the first movable input surface and the second movable input surface are both coupled to the post such that movement of the first movable input surface linearly moves the post along an axis against the switch to actuate the engine to the first state and movement of the second movable input surface linearly moves the post along the axis against the



switch to actuate the engine to the second state (page 3, line 26-page 4, line 20; page 4, line 28-page 8, line 3; page 8, line 28-page 10, line 14).

K. Claim 34

Claim 34 depends from claim 32 and further recites that the first movable input surface (356) and the second movable input surface (358) pivot to successively actuate the switch (page 7, lines 8-18).

L. Claim 35

Claim 35 depends from claim 32 and further recites that the first movable input surface (256) and the second movable input surface (258) slide along a substantially common plane to successively actuate the switch (page 6, lines 1-8).

M. Claim 39

Claim 39 depends from claim 32 and recites that wherein the first movable input surface and the second movable input surface have distinct associated indicia (page 3, line 26-page 4, line 20; page 4, line 28-page 8, line 3; page 8, line 28-page 10, line 14).

N. Claim 41

Claim 41 recites an electronic device comprising:

a face(32) (page 3, lines 21-25);

a switch (26) configured such that successive actuations of the switch actuates the device between a first state and a second state (page 3, lines 10-20); and

a switch actuation mechanism configured to actuate against a portion of the switch a first time in response to a first manual input along the face and to actuate against the same portion of the switch a second time in response to



a second manual input along the face, wherein the second input has at least one characteristic, other than time at which it is performed, distinct from the first input, wherein the switch actuation mechanism includes an actuation member slidable along the face, wherein the first input includes sliding the actuation member in a first manner and wherein the second input includes sliding the actuation member in a second manner (page 3, line 26-page 4, line 20; page 4, line 28-page 8, line 3; page 6, lines 1-8; page 8, line 28-page 10, line 14).

**6. Grounds of rejection to be reviewed on appeal. A concise statement of each ground of rejection presented for review.**

The issues on appeal are: **(1)** whether the Examiner erred in rejecting claims 1, 2, 5-10, 14-16, 18, 20-28, 30, 31 and 40 under 35 U.S.C. § 103(a) as being unpatentable over US Patent 6774509 (Chu) in view of US Patent 6459060 (Bartok); **(2)** whether the Examiner erred in rejecting claims 3, 4 and 19 under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 6774509 (Chu) in view of US Patent 6459060 (Bartok) and further in view of US Patent 6075925 (Downing); **(3)** whether the Examiner erred in rejecting claims 9-13 under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. US Patent 6774509 (Chu) in view of US Patent 6459060 (Bartok) and further in view of US Patent 5877746 (Parks); **(4)** whether the Examiner erred in rejecting claims 17, 29, 35, 41 and 42 under 35 U.S.C. § 103(a) as being unpatentable over US Patent 6774509 (Chu) in view of US Patent 6459060 (Bartok) and further in view of US Patent 4191867 (Feaster); **(5)** whether the Examiner erred in rejecting claims 32-34, 36 and 38 under 35 U.S.C. § 103(a) as being unpatentable over US Patent 6774509 (Chu) in view of US Patent 6459060 (Bartok) and further in view of US Patent 6337961 (Mori); and **(6)** whether the Examiner erred in rejecting claim 39 under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 6774509 (Chu) in view of US Patent 6459060 (Bartok) and further in view of US Patent 6337961 (Mori) and US Patent 5877746 (Parks).



## 7. Argument

### I. Legal Standards

#### Law of Obviousness

Claims 1-36 and 38-42 are rejected under 35 U.S.C. § 103(a), which states:

A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The legal standards under 35 U.S.C. § 103(a) are well-settled. Obviousness under 35 U.S.C. § 103(a) involves four factual inquiries: 1) the scope and content of the prior art; 2) the differences between the claims and the prior art; 3) the level of ordinary skill in the pertinent art; and 4) secondary considerations, if any, of nonobviousness. See KSR Intl v. Teleflex Inc., 550 US 398, (2007); Graham v. John Deere Co., 383 U.S. 1, 148 U.S.P.Q. 459 (1966).

In proceedings before the Patent and Trademark Office, the Examiner bears the burden of establishing a prima facie case of obviousness based upon the prior art. In re Piasecki, 745 F.2d 1468, 1471-72, 223 U.S.P.Q. 785, 787-88 (Fed. Cir. 1984). “[The Examiner] can satisfy this burden only by showing some objective teaching in the prior art or that knowledge generally available to one of ordinary skill in the art would lead that individual to combine the relevant teachings of the references.” In re Fritch, 972 F.2d 1260, 1265, 23 U.S.P.Q. 2d 1780, 1783 (Fed. Cir. 1992).



As noted by the Federal Circuit, the “factual inquiry whether to combine references must be thorough and searching.” McGinley v. Franklin Sports, Inc., 262 F.3d 1339, 60 U.S.P.Q. 2d 1001 (Fed. Cir. 2001). Further, it “must be based on objective evidence of record.” In re Lee, 277 F.3d 1338, 61 U.S.P.Q. 2d 1430 (Fed. Cir. 2002). The teaching or suggestion to make the claimed combination must be found in the prior art, and not in the applicant’s disclosure. In re Vaeck, 947 F.2d 488, 20 U.S.P.Q. 2d 1438 (Fed. Cir. 1991). The test for determining the obviousness of combining known elements is not rigid, but depends on such factors as the interrelated teaching of multiple patents, the effects of demands known to the design community or present in the marketplace and the background knowledge possessed by a person of ordinary skill in the art. KSR Intl v. Teleflex Inc., 550 US 398, (2007). The mere fact that references can be combined or modified does not render the resultant combination obvious unless the prior art also suggests the desirability of the combination. In re Mills, 916 F.2d 680, 16 U.S.P.Q. 2d 1430 (Fed. Cir. 1990). “It is improper, in determining whether a person of ordinary skill would have been led to this combination of references, simply to ‘[use] that which the inventor taught against its teacher.’” Lee (citing W.L. Gore v. Garlock, Inc., 721 F.2d 1540, 1553, 220 U.S.P.Q. 303, 312-13 (Fed. Cir. 1983)). Teaching away from the claimed invention is a strong indication of non-obviousness and an improper combination of references. U.S. v. Adams, 383 U.S. 39 (1966).



**II. The Examiner's Rejection of Claims 1, 2, 5-10, 14-16, 18, 20-28, 30 31 and 40 under 35 U.S.C. §103(a) as being unpatentable over US Patent 6774509 (Chu) in view of US Patent 6459060 (Bartok) Should be Reversed Because It Would Not Be Obvious to Modify Chu based upon Bartok so As to Include Every Limitation of Each of the Claims.**

**A. Claim 1**

Claim 1 recites an electronic device which includes a switch actuation mechanism configured to actuate against a point of contact of a switch a first time in response to a first manual input to actuate the device to a first state and to actuate against the same point of contact of the switch a second time in response to a second manual input to actuate the device to a second state. The second input has a least one characteristic, other than time at which it is performed, distinct from the first input.

Neither Chu nor Bartok, alone or in combination, disclose or suggest a switch actuation mechanism that actuates against the same point of contact of a switch in response to first and second distinct manual inputs to actuate a device between first and second states. As acknowledged by the Examiner, Chu does not disclose two inputs having a characteristic, other than the time at which they are performed, distinct from one another. As a result, the Examiner attempts to additionally rely upon Bartok by attempting to combine the completely distinct teachings of Chu and Bartok together in an attempt to read the hypothetical combination upon the claims. In particular, the Examiner asserts that:

It would have been obvious to one of ordinary skill in the art, at the time of the invention, to have used a single point of contact with a two-surface switch face like that of Bartok, because a single-point-of-contact construction is simpler than a two-point-of-contact construction, and a two-surface switch (e.g. with different markings or texture for ON and



OFF) would make it easier for user with poor vision to distinguish between the two functions.

(Office Action dated December 13, 2007, page 4).

However, the alleged hypothetical combination of Chu and Bartok fails to establish a prima facie case of obviousness because: (1) the alleged motivation itself lacks merit and (2) the hypothetical combination would destroy the intended function and principle of operation of each of the combined references.

(1) The alleged motivation lacks merit.

The assertion that it would be obvious to use a single point of contact switch (Chu) with a two surface switch face (Bartok) lacks merit. Although it may be true that a single point of contact instruction is simpler than a two point of contact instruction, this ignores the basic fact that a single point of contact construction only requires a single surface switch face while a two point of contact switch requires a two surface switch face. It would make little sense to one of ordinary skill in the art, absent Appellant's own disclosure, to put a two surface switch face used for a two point of contact switch on a single point of contact switch. Bartok requires a two surface switch face because Bartok requires pivoting of face (108), Chu does not. Applying a rationale analogous to the rationale asserted by the Examiner, one of ordinary skill in the art would alternatively use a single surface switch face in Chu rather than a two surface switch face because (1) a two surface switch face would serve no function in Chu AND a single surface switch face construction "is simpler than" a two surface switch face.

The Examiner's argument is like arguing that it would be obvious to put a stick shift from a manual transmission on a vehicle having an automatic transmission. In both cases, the modification would serve no previously identified purpose and may indeed impair or destroy the intended functioning of the device which is modified.



The Examiner also asserts incorrectly that it would be obvious to use a single point of contact (Chu) with a two surface switch face (Bartok) because such a modification **"would make it easier for user with poor vision to distinguish between the two functions."**

First, how does supposedly providing a two surface switch with different surface markings for different functions supposedly assist a user with poor vision in distinguishing between two functions? What is the source of this alleged motivation?

Second, if the goal is to assist a person with poor vision, wouldn't the real solution be to simply make a single surface switch larger and more visible? Absent Appellants' own disclosure, no motivation is disclosed in either Chu or Bartok that would lead one of ordinary skill in the art to apply a rocker switch cover or face (108) of Bartok to a single point of contact, non-rocker switch of Chu. Moreover, the Examiner has failed to present any evidence that, at the time of Appellants' invention, putting a rocker switch face (Bartok) on a single point of contact switch (Chu) would yield a predictable result that would address a recognized need in the marketplace. (See KSR Intl v. Teleflex Inc., supra).

(2) The alleged combination would destroy the principle of operation and functioning of both original devices of Chu and Bartok.

The rejection is also improper because the alleged combination would destroy the principle of operation and intended functioning of both of the combined references. (See MPEP 2143.01: "the proposed modification cannot render the prior art unsatisfactory for its intended purpose" and "the proposed modification cannot change the principle of operation of the reference".)

Chu requires that central operating member 141 be linearly depressed so as to variably compress resistive surface 124 of soft knob 123 against track 133 to vary the resistance and to vary the speed of the motor. To



somehow add the pivoting surface 108 Bartok to Chu would prevent Chu from even working and would surely at least change its principle of operation.

Examiner's Response to Such Points

In response to such points, the Examiner (1) incorrectly argues that modifying Chu based upon Bartok would not destroy or alter the intended functioning principle of operation of Bartok and (2) continues to rely upon an alleged motivation that (A) is not even applicable to the alleged combination proposed by the Examiner and (B) is based upon Appellants' own disclosure.

(1) Modifying Chu based upon Bartok would destroy or alter the intended functioning and principle of operation of Chu and Bartok.

The Examiner attempts to argue that:

Since both surfaces of the face of the single point of contact switch of Chu would actuate on the same point of contact via the same actuation mechanism, the addition of the second surface would simply add a second point of actuation to the switch, the second point of actuation functioning the same as the first (i.e. pressing the first surfaced twice would perform the same sequence of functions as pressing the first surfaced once followed by pressing the second surface), thus allowing the switch to be actuated from two different locations (these two surfaces). Therefore, the intended function and principle of Chu would be preserved if a face with two surfaces was used.

(Office Action dated December 13, 2007, pages 10-11).

However, the Examiner's line of argument is superficial. The Examiner's line of argument seemingly overlooks the ACTUAL teachings of Bartok and requires a complete reconstruction and reengineering of both Chu and Bartok.

First, the rocker switch of Bartok requires a central fulcrum provided by blades 116, 118 to function. In contrast, Chu requires that this central location



include the micro switch 110. If one were to keep the single point contact switch of Chu, and omit the fulcrum, the two-point rocker switch of Bartok would not work. Thus, the principal operation taught by Bartok is destroyed.

Second, one of the main principles of operation of Chu is that **linear** depressment of member 141 a first distance results in pressure being applied at a first location (at micro switch 110) and that **linear** depressment of member 141 a second greater distance results in pressure also being applied at a second distinct location to compress knob 123.

Adding the rocker switch of Bartok to Chu would change this principle of operation. With the rocker switch of Bartok, depressment of the left side of actuator 108 (as seen in Figure 4) to a first extent results in terminal 122 being contacted at by rocker contact 152. Depressment of the same left side of actuator 108 to a second greater extent only results in the exact same terminal 122 being contacted by rocker contact 152.

With Bartok, two distinct switches or electrical circuits are not actuated depending upon the **extent** to which actuator 108 is depressed. To add the rocker switch of Bartok to Chu would change the principle of operation of Chu which requires that distinct electrical circuits or switches (micro switch 110 AND variable resistor 120) be selectively actuated by varying **the extent** to which a button is depressed, not the side of the rocker switch that is depressed. Obviously, it would be much more difficult for a person to control the **LINEAR EXTENT** to which the switch assembly of Chu is moved using a pivoting rocker face. Recognizing this fact, one of ordinary skill in the art would NOT modify Chu to include the rocker face of Bartok

(2) The alleged motivation is based upon impermissible hindsight reasoning using Appellants' own disclosure as a blueprint.

The Examiner seems to argue that it would be obvious to take the rocker switch face of Bartok and add it to the switch assembly of Chu. As noted above, the Examiner has failed to provide any motivation for this



combination. Moreover, absent Appellant's own disclosure, what would possibly lead one of ordinary skill in the art to make such a modification? The rocker switch of Chu is for the specific purpose of ALTERNATELY contacting terminal 120 OR terminal 122. Chu does not have this need. Nowhere in Chu or Bartok is there any suggestion of any benefit that could be achieved by adding a rocker switch to actuate the micro switch 110 of Chu.

Accordingly, the rejection of claim 1 is improper and should be reversed. The rejection of claims 2, 5-10, 14-16, 18, 20, 21, which depend from claim 1, should be reversed for at least the same reasons.

B. Claim 22

Claim 22 recites an electronic device including a switch and means along a face for actuating the switch. The switch is configured such that successive actuations of the switch that are identical, other than the time at which they are performed, actuate the device between the first state and a second state. The means along a face actuates the switch a first time using a first manual input and a second time using a second manual input having at least one characteristic, other than the time it which is performed, distinct from the first manual input.

Neither Chu nor Bartok, alone or in combination, discloses a switch that is configured such that successive identical actuations of the switch actuated device between two states. In Chu, different states can only be attained by different or distinct actuations (distinct degrees of compression of surface 124 across track 133). In Bartok, distinct states can only be achieved by distinct pivoting of rocking contact 138. Accordingly, the rejection of claim 22 is improper and should be reversed for least this reason.

Moreover, as noted above with respect to the rejection of claim 1, the alleged hypothetical combination of Chu and Bartok lacks merit because: (1) the alleged motivation lacks merit and (2) the hypothetical combination would



destroy the intended function and principle of operation of each of the combined references.

Examiner's Final Office Action Response to such points

In response to such points, the Examiner (1) incorrectly characterizes the operation of Chu and (2) asserts that the actual construction and operation of what is disclosed by Chu is somehow not relevant simply because the Examiner superficially described Chu in the first place.

In response to such points, the Examiner asserted:

Chu discloses successive identical actuations (presses of knob 112) switching the device between two states (on and off) (see Chu, column 6, lines 9-12). A first press of the switch turns the motor on, and a second, identical press turns the motor off.

(Final Office Action dated October 16, 2008, page 11). However, this assertion is superficial and is simply not true.

First, The Examiner's citation of three lines (column 6, lines 9-12) of the Patent to Chu ignores the remaining actual teaching of Chu and does not support the Examiner's characterization of Chu. As noted above, in Chu, different states can only be attained by **different or distinct actuations** (distinct degrees of compression of surface 124 across track 133).

Second, the Examiner asserts that "surface 124 and track 133 were not cited by the Examiner and are not relevant to the rejection." (See Final Office Action dated October 16, 2008, page 11).

However, surface 124 and track 133 of Chu are entirely relevant to the question of what Chu actually teaches. As noted above, in Chu, different states can only be attained by different or distinct actuations (distinct degrees of compression of surface 124 across track 133). This is in direct contradiction to what the claims require.



Accordingly, the rejection of claim 22 is improper and should be reversed. Claims 23 and 24 depend from claim 22 and overcome the rejection for the same reasons.

C. Claim 25

Claim 25 recites a method for actuating an electronic device between a first state and a second state. The method includes providing a switch configured such that successive actuations of the switch that are identical other than the time at which they are performed in actuate the device between the first state and a second state. The method further includes applying a first manual input so as to actuate the switch a first time and applying a second manual input so as to actuate the switch a second time, wherein the first and second manual inputs are distinct.

Neither Chu nor Bartok, alone or in combination, discloses a switch that is configured such that successive identical actuations of the switch actuated device between two states. In Chu, different states can only be attained by different or distinct actuations (distinct degrees of compression of surface 124 across track 133). In Bartok, distinct states can only be achieved by distinct pivoting of rocking contact 138.

In the final Office Action, in response to such points regarding claim 25, the Examiner relied upon the same response discussed above with respect to the rejection of claim 22. As noted above with respect to claim 22, the Examiner's response lacks merit. Accordingly, the rejection of claim 25 is improper and should be reversed for at least this reason.

Moreover, as noted above with respect to the rejection of claim 1, the alleged hypothetical combination of Chu and Bartok lacks merit because: (1) the alleged motivation lacks merit and (2) the hypothetical combination would destroy the intended function and principle of operation of each of the combined references. Accordingly, the rejection of claim 25 is improper and



should be reversed. Claims 28 and 30 depend from claim 25 and overcome the rejection for the same reasons.

D. Claim 2

Claim 2 depends from claim 1 and recites that a function is performed when the device is in the first state and that the function is discontinued when the devices in the second state.

Neither Chu nor Bartok, alone or in combination, discloses the device of claim 2. In rejecting claim 2, the Examiner attempts to argue that it would be obvious to apply the rocker switch face 1080 Bartok to the switch of Chu. However, Chu does not disclose a switch, wherein a function is performed when the switch of the device is in the first state and wherein the function is discontinued when the switch of the device is in the second state. In contrast, the switch disclosed by Chu provides variable speed control of the motor. Depressment of operating member 141 of Chu turns on the motor. Further depressment increases the speed of the motor. Chu does not disclose a first depressment which turns on the motor and a second depressment which shuts off the motor.

In his rejection of claim 2, the Examiner argues that "a function is performed when the device of Chu is in a first state (On) and discontinued when the device is in a second state (off)." (See Office Action dated December 13, 2007, page 4).

However, the first state and the second state recited in claim 2 are defined in claim 1 which recites that the first state and the second state are the result of successive **actuations** of a switch. Once again, in contrast, in Chu, a first actuation results in the motor being turned on. A second successive actuation ALSO results in the motor being turned on. The Examiner appears to misunderstand the operation of Chu. The motor of Chu does not turn off in response to a second actuation. Rather, in Chu, the motor turns off simply when a person stops depressing the button. (See col 4, lines



35-48 and col 6, lines 35-52) Thus, the rejection of claim 2 should be reversed for this additional reason.

E. Claim 9

Claim 9 depends from claim 5 which recites that the switch actuation mechanism includes a first movable surface and a second movable surface. Claim 9 further recites that the first movable surface has a first indicia while the second movable surface has a second indicia distinct from the first indicia.

Neither Chu nor Bartok, alone or in combination, disclose or suggest a switch actuation mechanism having two surfaces, wherein each surface is provided with a distinct indicia. In rejecting claim 9, the Examiner attempts to assert that it would be obvious to add the rocker switch of Bartok onto the non-rocker switch of Chu. Even assuming, *arguendo*, that such a modification is possible, there would still be absolutely no reason to provide the rocker switch with distinct indicia since depressment or other movement of the two surfaces having distinct indicia would NOT correlate to a distinct function. Once again, Chu provides variable motor speed control based on the extent of depressment. Depressing distinct portion would not necessarily result in distinct binary functions. In contrast, a first depressment of the switch of Chu turns on the motor. Likewise, a second subsequent depressment of the switch **ALSO** turns on the motor. Therefore, it would not seem to make sense to provide the hypothetical rocker face with distinct indicia. Accordingly, the rejection of claim 9 should be reversed for at least this additional reason.

F. Claim 21

Claim 21 depends from claim 1 and recites that the switch actuation mechanism is configured to also actuate the switch the second time in response to a third input identical to the first input, other than the time at which it is performed in lieu of the second input.



Neither Chu nor Bartok, alone or in combination, disclose or suggest a switch actuation mechanism that is configured to also actuate the switch the second time in response to a third input identical to the first input, other than the time at which it is performed in lieu of the second input. Depressment of the same side of the rocker switch of Bartok (hypothetically added to the switch of Chu) will not result in actuation of a device to different states. Likewise, depressment of central operating member 141 of Chu to the same extent at distinct times will not result in the motor being driven at distinct speeds. Accordingly, the rejection of claim 21 should be reversed for this additional reason.

**III. The Examiner's Rejection of Claims 3, 4 and 19 under 35 U.S.C. §103(a) as being unpatentable over U.S. Patent No. 6774509 (Chu) in view of US Patent 6459060 (Bartok) and further in view of US Patent 6075925 (Downing) Should be Reversed Because It Would Not Be Obvious to Modify Chu based upon Bartok and Downing so As to Include Every Limitation of Each of the Claims.**

Section 6 of the Office Action rejected claims 3, 4 and 19 under 35 USC 103(a) as being unpatentable over Chu US Patent 6,774,509 in view of Bartok US Patent 6,459,060 and further in view of Downing et al. US Patent 6,075,925. Claims 3, 4 and 19 depend from claim 1 and overcome the rejection for the same reasons discussed above with respect to claim 1. Downing fails to satisfy the deficiencies of Chu and Bartok.

**IV. The Examiner's Rejection of claims 9-13 under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. US Patent 6774509 (Chu) in view of US Patent 6459060 (Bartok) and further in view of US Patent 5877746 (Parks) Should be Reversed Because It Would Not Be Obvious to Modify Chu based upon Bartok and Parks so As to Include Every Limitation of Each of the Claims.**



Claims 9-13 depend from claim 1 and overcome the rejection for the same reasons discussed above with respect to claim 1. Parks fails to satisfy the deficiencies of Chu and Bartok.

Moreover, claims 13 depends from claim 12 and further recites that a function is performed when the device is in the first state and that the function is discontinued when the devices in the second state.

Neither Chu, Bartok nor Parks, alone or in combination, disclose the device of claim 13. In rejecting claim 13, the Examiner attempts to argue that it would be obvious to apply the rocker switch face 108 of Bartok to the non-rocker switch of Chu. However, Chu does not disclose a switch, wherein a function is performed when the switch of the device is in the first state and wherein the function is discontinued when the switch of the device is in the second state. In contrast, the switch disclosed by Chu provides variable speed control of the motor. Depressment of operating member 141 of Chu turns on the motor. Further depressment increases the speed of the motor. Chu does not disclose a first depressment which turns on the motor and a second depressment which shuts off the motor.

In apparent response to such previously raised points, the Examiner dated December 13, 2007 further attempts to argue that:

It would have been obvious to one of ordinary skill in the art, at the time of the invention, to have used the device of Chu in view of Bartok with green and red start and stop buttons, as taught by Parks, so that a novice user can determine which button to press to perform a given function and be able to stop a device in an emergency.

(Office Action dated December 13, 2007, page 7).

However, this assertion makes little sense given that Chu does **not** disclose separate start and stop buttons. Chu does **not** disclose that successive actuations turn the motor of Chu on and off. In complete contrast, the motor of Chu is turned on upon depressment of member 141 and is turned



off upon release of member 141. How could one use it Examiner's proposed red and green start and stop buttons to turn on and turn off the device given the ACTUAL way that Chu operates? Thus, the rejection of claim 13 should be reversed for this additional reason.

**V. The Examiner's Rejection of claims 17, 29, 35, 41 and 42 under 35 U.S.C. § 103(a) as being unpatentable over US Patent 6774509 (Chu) in view of US Patent 6459060 (Bartok) and further in view of US Patent 4191867 (Feaster) Should be Reversed Because It Would Not Be Obvious to Modify Chu based upon Bartok and Feaster so As to Include Every Limitation of Each of the Claims.**

Claims 17 and 41, claim 29 and claim 35 depend from claims 1, 25 and 32, respectively, and overcome the rejection for the same reasons discussed above. Feaster fails to satisfy the deficiencies of Chu, Bartok or Mori. Claims 17, 29, 35, 41 and 42 overcome the rejection for the following additional reasons.

Claims 17, 29, 35 and 42 each recite an actuation member slidable along the face, wherein the first input includes sliding actuation member in a first manner or direction and wherein the second input includes sliding actuation member and a second manner or direction.

Neither Chu, Bartok nor Feaster, alone or in combination, disclose or suggest a mechanism (claim 17), the method (claim 29), the image forming device (claim 35) or the electronic device (claim 41) wherein the actuation mechanism includes an actuation member that slides along a face. In rejecting such claims, the Examiner once again attempts to hodgepodge multiple references together while disregarding the fact that such modifications destroy the intended functioning of the modified devices. With respect to the reliance upon Feaster, the Examiner fails to provide any support for the conclusory statement that one with a disability may more



easily slide a slidable actuation member than a push a button. This alleged motivation appears to come out of thin air.

Moreover, neither Chu nor Bartok would appear to permit use of a sliding switch plate. As noted above, Bartok requires pivotal movement. Chu requires linear movement. Any such modification would appear to require a complete reconstruction, selectively picking and choosing features from each of the references so as to read upon the claim limitations. The prior art simply lacks any such motivation for such a mish mashing of references.

Accordingly, the rejection of claim 17, 29, 35, 41 and 42 should be reversed.

**VI. The Examiner's Rejection of claims 32-34, 36 and 38 under 35 U.S.C. § 103(a) as being unpatentable over US Patent 6774509 (Chu) in view of US Patent 6459060 (Bartok) and further in view of US Patent 6337961 (Mori) Should be Reversed Because It Would Not Be Obvious to Modify Chu based upon Bartok and Mori so As to Include Every Limitation of Each of the Claims.**

**A. Claim 32**

Claim 32 recites a switch configured such that successive actuations of the switch actuates an image forming engine between a first state and a second state, a first movable input surface and a second movable input surface. The first movable input surface and the second movable input surface are both rigidly coupled to a post such that movement of the first movable input surface linearly moves the post along an axis against the switch to actuate the engine to the first state and such that movement of the second movable input surface linearly moves the post along the axis against the switch to actuate the engine to a second state.

Neither Chu, Bartok nor Mori, alone or in combination, disclose or suggest first and second movable input surfaces that are both coupled to a post such that movement of the first movable input surface linearly moves the post along an axis against the switch to actuate the engine to the first state



and such that movement of the second movable input surface linearly moves the post along the axis against the switch to actuate the engine to a second state. In rejecting claim 32, the Examiner takes the position that it would be obvious to replace central operating member 141 of Chu with the rocker switch plate 108 of Bartok. Rocker switch plate 108 of Bartok does not linearly move a post along an axis against a switch. Claims 33-34, 36 and 38 depend from claim 32 and overcome the rejection for the same reasons.

B. Claim 34

Claim 34 depends from claim 32 and recites at the first movable input surface and the second movable input surface PIVOT to successively actuate the switch. Thus, the limitations of claim 34, in conjunction with the limitations of claim 32, result in movable input surfaces that pivot to linearly move a post against a switch.

Neither Chu, Bartok nor Mori disclose movable input surfaces that pivot to linearly move a post against a switch. Bartok only pivots while Chu only linearly moves. Any proposed combination of the two would lack any motivation provided by either reference and would appear to be a reconstruction based upon impermissible hindsight reasoning using Appellants' own disclosure as a blueprint. Accordingly, the rejection of claim 34 is improper and should be reversed.

**VII. The Examiner's Rejection of claim 39 under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 6774509 (Chu) in view of US Patent 6459060 (Bartok) and further in view of US Patent 6337961 (Mori) and US Patent 5877746 (Parks) Should be Reversed Because It Would Not Be Obvious to Modify Chu based upon Bartok, Mori and Parks so As to Include Every Limitation of Each of the Claims.**

Claim 39 depends from claim 32 and overcomes the rejection for the same reasons discussed above with respect to the rejection of claim 32 based



upon Chu, Bartok and Mori. Parks fails to satisfy the deficiencies of Chu, Bartok and Mori.

### **Conclusion**

In view of the foregoing, the Appellants submit that **(1)** claims 1, 2, 5-10, 14-16, 18, 20-28, 30, 31 and 40 under 35 U.S.C. § 103(a) are not properly rejected as being as being unpatentable over US Patent 6774509 (Chu) in view of US Patent 6459060 (Bartok) and are therefore patentable; **(2)** claims 3, 4 and 19 under 35 U.S.C. § 103(a) are not properly rejected as being unpatentable over U.S. Patent No. 6774509 (Chu) in view of US Patent 6459060 (Bartok) and further in view of US Patent 6075925 (Downing) and are therefore patentable; **(3)** claims 9-13 are not properly rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. US Patent 6774509 (Chu) in view of US Patent 6459060 (Bartok) and further in view of US Patent 5877746 (Parks) and are therefore patentable; **(4)** claims 17, 29, 35 and 41 are not properly rejected under 35 U.S.C. § 103(a) as being unpatentable over US Patent 6774509 (Chu) in view of US Patent 6459060 (Bartok) and further in view of US Patent 4191867 (Feaster) and are therefore patentable; **(5)** claims 32-34, 36 and 38 are not properly rejected under 35 U.S.C. § 103(a) as being unpatentable over US Patent 6774509 (Chu) in view of US Patent 6459060 (Bartok) and further in view of US Patent 6337961 (Mori) and are therefore patentable; and **(6)** claim 39 is not properly rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 6774509 (Chu) in view of US Patent 6459060 (Bartok) and further in view of US Patent 6337961 (Mori) and US Patent 5877746 (Parks) and is therefore patentable.



Summary

For the foregoing, it is submitted that the Examiner's rejections are erroneous, and reversal of the rejections is respectfully requested.

Dated this 12<sup>th</sup> day of June, 2009.

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**CLAIMS APPENDIX**

1. (Previously Presented) An electronic device comprising:

a face;

a switch configured such that successive actuations of the switch actuate the device between a first state and a second state; and

a switch actuation mechanism configured to actuate against a point of contact of the switch a first time in response to a first manual input along the face to actuate the device to the first state and to actuate against the same point of contact portion of the switch a second time in response to a second manual input along the face to actuate the device to the second state, wherein the second input has at least one characteristic, other than time at which it is performed, distinct from the first input.

2. (Original) The device of Claim 1, wherein a function is performed when the device is in the first state and wherein the function is discontinued when the device is in the second state.

3. (Original) The device of Claim 2, wherein the function is printing upon a print medium.

4. (Original) The device of Claim 3, wherein the switch actuation mechanism includes a first movable surface and a second movable surface and wherein the first input includes moving the first movable surface and wherein the second input includes moving the second movable surface.

5. (Original) The device of Claim 1, wherein the switch actuation mechanism includes a first movable surface and a second movable surface and wherein the first input includes moving the first movable surface and wherein the second input includes moving the second movable surface.



6. (Original) The device of Claim 5, wherein the first movable surface is depressible.

7. (Original) The device of Claim 6, wherein the second movable surface is depressible.

8. (Original) The device of Claim 5, wherein the first surface and the second surface are spaced from one another along the face.

9. (Original) The device of Claim 5, wherein the first movable surface has a first indicia and wherein the second movable surface has a second indicia distinct from the first indicia.

10. (Original) The device of Claim 9, wherein the first indicia and the second indicia have distinct characteristics chosen from a group including color, shape, size, texture, markings, alphanumeric symbols and hardness.

11. (Original) The device of Claim 10, wherein the first indicia includes a first color and wherein the second indicia includes a second color distinct from the first color.

12. (Original) The device of Claim 11, wherein the first color is green and wherein the second color is red.

13. (Original) The device of Claim 12, wherein the device performs a function upon movement of the first surface and discontinues the function upon movement of the second surface.

14. (Previously Presented) The device of Claim 5, wherein the actuation mechanism includes:

a first button providing the first surface;

a second button providing the second surface; and



an extension coupled to the first button and the second button and linearly movable relative to the switch.

15. (Previously Presented) The device of Claim 14 including a guide guiding linear movement of the extension relative to the switch.

16. (Previously Presented) The device of Claim 14, wherein the extension is linearly movable relative to the first button.

17. (Original) The device of Claim 1, wherein the switch actuation mechanism includes an actuation member slidable along the face, wherein the first input includes sliding the actuation member in a first manner and wherein the second input includes sliding the actuation member in a second manner.

18. (Original) The device of Claim 1, wherein the actuation mechanism includes an actuation member pivotally supported along the face, wherein the first input includes pivoting the actuation member in a first manner and wherein the second input includes pivoting the actuation member in a second manner.

19. (Previously Presented) The device of Claim 1 including:

an imaging material dispensing device; and

a controller coupled to the switch and configured to generate control signals upon actuation of the switch, wherein the dispensing device dispenses imaging material and discontinues dispensing imaging material in response to the control signals.



20. (Original) The device of Claim 1, wherein the first input and the second input are parallel to one another.

21. (Previously Presented) The device of Claim 1, wherein the switch actuation mechanism is configured to also actuate the switch the second time in response to a third input identical to the first input, other than the time at which it is performed and in lieu of the second input.

22. (Previously Presented) An electronic device comprising:

a face;

a switch configured such that successive actuations of the switch that are identical other than time at which they are performed, actuate the device between a first state and a second state; and

means along the face for actuating the switch a first time using a first manual input and a second time using a second manual input having at least one characteristic, other than time at which it is performed, distinct from the first manual input.

23. (Original) The device of Claim 22, wherein the first input and the second input are parallel to one another.

24. (Previously Presented) The device of Claim 22, wherein the means for actuating is configured to also actuate the switch the second time in response to a third input identical to the first input, other than the time at which it is performed and in lieu of the second input.

25. (Previously Presented) A method for actuating an electronic device between a first state and a second state, the method comprising:

providing a switch configured such that successive actuations of the switch that are identical other than time at which they are performed, actuate the device between a first state and a second state;



applying a first manual input, along a substantially planar face of the device so as to actuate the switch a first time; and

applying a second manual input along the substantially planar face of the device so as to actuate the switch a second time, wherein the second manual input has at least one characteristic, other than the time at which it is performed, that is distinct from the first manual input.

26. (Original) The method of Claim 25, wherein the step of applying a first input includes depressing a first actuation member operably coupled to the switch.

27. (Original) The method of Claim 26, wherein the step of applying a second input includes depressing a second actuation member operably coupled to the switch.

28. (Original) The method of Claim 25, wherein the step of applying a first input includes moving an actuation member in a first manner and wherein the step of applying a second input includes moving the actuation member in a second distinct manner.

29. (Original) The method of Claim 28, wherein the first manner includes sliding the actuation member along the face in a first direction and wherein the second manner includes sliding the actuation member in a second direction along the face.

30. (Original) The method of Claim 28, wherein the first manner includes pivoting the actuation member in a first direction and wherein the second manner includes pivoting the actuation member in a second direction.

31. (Original) The method of Claim 25, wherein the first input and the second input are parallel to one another.

32. (Previously Presented) An image forming device comprising:



an image forming engine actuatable between a first state and a second state ;

a switch configured such that successive actuations of the switch actuates the engine between the first state and the second state;

a post operably coupled to the switch to apply an actuating force to the switch;

a first movable input surface configured to successively actuate the switch; and

a second movable input surface configured to successively actuate the switch, wherein the first movable input surface and the second movable input surface are both coupled to the post such that movement of the first movable input surface linearly moves the post along an axis against the switch to actuate the engine to the first state and movement of the second movable input surface linearly moves the post along the axis against the switch to actuate the engine to the second state.

33. (Original) The image forming device of claim 32 wherein the first movable input surface and the second movable input surface are located on a substantially planar region of an exterior of the device.

34. (Original) The image forming device of claim 32 wherein the first movable input surface and the second movable input surface pivot to successively actuate the switch.



35. (Previously Presented) The image forming device of claim 32 wherein the first movable input surface and the second movable input surface slide along a substantially common plane to successively actuate the switch.

36. (Original) The image forming device of claim 32 wherein the first movable input surface and the second movable input surface are configured to be depressed to successively actuate the switch.

38. (Original) The image forming device of claim 32 including a first button providing the first movable input surface and a second button providing the second movable input surface.

39. (Original) The image forming device of claim 32 wherein the first movable input surface and the second movable input surface have distinct associated indicia.

40. (Previously Presented) The electronic device of claim 1, wherein the switch includes a resilient depressible actuator, wherein a same portion of the actuator is depressed in response to both the first input and the second input.

41. (Previously Presented) An electronic device comprising:

a face;

a switch configured such that successive actuations of the switch actuates the device between a first state and a second state; and

a switch actuation mechanism configured to actuate against a portion of the switch a first time in response to a first manual input along the face and to actuate against the same portion of the switch a second time in response to a second manual input along the face, wherein the second input has at least one characteristic, other than time at which it is performed, distinct from the first input, wherein the switch actuation mechanism includes an actuation member slidable along the face, wherein the first input includes sliding the actuation member in a first



manner and wherein the second input includes sliding the actuation member in a second manner.

42. (Previously Presented) The device of Claim 1, wherein the switch is configured such that identical successive actuations of the switch actuates the device between the first state and the second state.



**EVIDENCE APPENDIX**

There is no evidence previously submitted under 37 C.F.R. §§ 1.130, 1.131 or 1.132 or other evidence entered by the Examiner and relied upon by Appellant in this appeal. Accordingly, the requirements of 37 C.F.R. §§ 41.37(c)(1)(ix) are satisfied.



**RELATED PROCEEDINGS APPENDIX**

There are no decisions rendered by a Court of the Board in a proceeding identified in the Related Appeals and Interferences section. Accordingly, the requirements of 37 C.F.R. §§ 41.37(c)(1)(x) are satisfied.